

CENTRAL HEMODYNAMIC EFFECTS OF VACUSAC EXPOSURE

PROCEDURE:

The effect of Vacusac exposure on blood pressure (BP), heart rate (HR) and cardiac output (CO) was studied in 8 healthy subjects. BP, HR and CO were registered in the resting supine position before, during and after 5 minutes of Vacusac exposure. Furthermore the effect of Vacusac exposure on the cardiovascular response to tilting was registered. The tilting procedure included 5 minutes of tilting to 60 degrees with and without application of the vacutec system.

The vacusac equipment was set to a negative pressure of 0.2 bar and program 1 was used as program-setting.

RESULTS:

In the resting supine position Vacusac exposure reduced HR and CO without concomitant changes in BP. The calculated vascular resistance was increased.

During tilting Vacusac exposure caused a diminished increase in HR, a diminished decrease in CO and a diminished decrease in BP.

The cessation of Vacusac exposure resulted in a return of BP-, HR- and CO-values to pretreatment levels.

CONCLUSION:

The changes in central hemodynamics during vacusac exposure in both the supine and the tilted position can be ascribed to a net positive pressure being imposed on the cardiovascular system. Local changes such as a shift in blood- or lymphatic-flow from one area to another cannot be revealed by the methods employed.



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